

```
void put(FRUIT fruit){
    enter(IM);
    if(full)
        wait(SP, SP_count, IM);
    full = true; plate = fruit;
    if(fruit == orange)
        signal(SS, SS_count, IM);
    else
        signal(SD, SD_count, IM);
    leave(IM);
}
```

```
void get(FRUIT fruit, FRUIT &x){
    enter(IM);
    if (!full || plate != fruit){
        if (fruit == orange)
            wait(SS, SS_count, IM);
        else
            wait(SD, SD_count, IM);
    }
    x = plate;
    full = false;
    signal(SP, SP_count, IM);
    leave(IM);
}
```

```
process father(){
    {准备好苹果};
    FMSD.put(apple);
}
```

```
process son( ){
    FMSD.get(orange, x);
    {吃取到的桔子};
}
```

```
process mother( ){
    {准备好桔子};
    FMSD.put(orange);
}
```

```
process daughter( ){
    FMSD.get(apple, x);
    {吃取到的苹果};
}
```